gene, results in a transgenic mouse having a homozygous disruption in the endogenous RPTPB gene and exhibiting, relative to a wild-type mouse, a developmental abnormality.

28. (New) The transgenic mouse of claim 27, wherein the developmental abnormality comprises an increased incidence of embryonic lethality.

29. (New) The transgenic mouse of claim 28, wherein the embryonic lethality occurs at about embryonic stage 9.5-10.5 days.

30. (New) The transgenic mouse of claim 27, wherein the developmental abnormality comprises reduced vascular development.

31. (New) The transgenic mouse of claim 30, wherein the reduced vascular development is observed in one or more of the embryo, the placenta and the yolk sac.

32. (New) The transgenic mouse of claim 26, wherein the transgenic mouse exhibits a developmental abnormality, relative to a wild-type mouse.

33. (New) The transgenic mouse of claim 32, wherein the developmental abnormality comprises an increased incidence of embryonic lethality.

34. (New) The transgenic mouse of claim 33, wherein the embryonic lethality occurs at about embryonic stage 9.5-10.5 days.

35. (New) The transgenic mouse of claim 32, wherein the developmental abnormality comprises reduced vascular development.

36. (New) The transgenic mouse of claim 32, wherein the reduced vascular development is observed in one or more of the embryo, the placenta and the yolk sac.

37. (New) The transgenic mouse of claim 32, wherein the developmental abnormality comprises reduced hematopoiesis.

38. (New) A method of producing a transgenic mouse comprising a homozygous disruption in an endogenous RPTPB gene, the method comprising:

(a) providing a murine stem cell comprising a disruption in an endogenous RPTPB gene;

(b) introducing the murine stem cell into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to a chimeric mouse;

(c) breeding the chimeric mouse to produce a heterozygous RPTPB gene-disrupted mouse; and

(d) breeding the heterozygous mouse to produce the transgenic mouse, wherein the transgenic mouse exhibits a developmental abnormality, relative to a wild-type mouse.

39. (New) A targeting construct comprising:

(a) a first polynucleotide sequence homologous to a first region of an endogenous RPTPB gene;

(b) a second polynucleotide sequence homologous to a second region of the RPTPB gene; and

(c) a selectable marker located between the first and second polynucleotide sequences,

wherein the targeting construct when introduced into a murine embryonic stem cell yields a transgenic mouse having a homozygous disruption in the RPTPB gene, and wherein the transgenic mouse exhibits a developmental abnormality, relative to a wild-type mouse.

40. (New) A murine embryonic stem cell comprising a disruption in an endogenous RPTPB gene, the disruption produced using the targeting construct of claim 39.

41. (New) A cell obtained from the transgenic mouse of claim 14.